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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/729,523

12/04/2000

Kinney Bacon

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09/14/2006

SCIENTIFIC-ATLANTA, INC.
INTELLECTUAL PROPERTY DEPARTMENT
5030 SUGARLOAF PARKWAY
LAWRENCEVILLE, GA 30044

EXAMINER

SHERKAT, AREZOO

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,523

Applicant(s)

BACON ET AL.

Examiner

Arezoo Sherkat

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Claims 1-30 are pending.

Response to Arguments

Applicant's arguments filed 6/30/2006 have been fully considered but they are not persuasive.

Applicant argues that Chaney does not disclose assigning to the source device of the at least one packetized data stream, a first unique designator.

Based on Applicant's disclosure in paragraph 33 of page 6 of the specification, the unique designator is associated with the source of the portion of the multiplexed signal. In paragraph 25 of page 3, Applicant discloses that packets associated with MPEG Data 1 source are assigned the unique designator "11", and packets associated with MPEG Data 2 source are assigned the unique designator "00".

Examiner responds that Chaney discloses "Transport unit processes the signal from FEC, Forward Error Correction, **to detect and separate various types of data in the tuned signal. The data in the signal may be arranged in various formats.** ...

The signal depicted in Fig. 3 comprises a stream of data organized in packets of data bytes, i.e., "packetized" data. Each packet is associated with a **particular type, or sub-stream**, of information in the tuned channel's data stream. For example, the signal includes packets of program guide information, control information (i.e., ECM or EMM), video information, and audio information. **The sub-stream that a particular packet is**

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associated with, is defined by data included in a header portion of each packet
(col. 4, lines 50-67).

Chaney further discloses that "how the payload data is processed by smart card is determined both by the result of PID (i.e., first 12 bits of header) comparison in unit 474 **and by the contents of bits 13 through 16** of the packet header extracted by the unit 472. ... Bits 13 through 16 of the header control security-related operations (see table 2 and related description) in the smart card. If bit 13 (ECM flag) is active, the payload includes ECM data that requires key generation processing by security controller 183. If bit 15 (ENC flag) is active, the payload is encrypted and is descrambled in descrambling unit 478 within descrambler 185. **Bit 16 determines whether key A or key B will be used in unit 478 for descrambling** (col. 8, lines 20-58).

Examiner respectfully maintains the rejection communicated in the office action of 2/24/2006, as follows:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "assigning to the source device of the at least one packetized data stream a first unique designator", is not properly described in the application as filed. Applicant discloses that "The Stream Select or transport stream source indicator signal 430 indicates the source of the associated portion of the signal, portions including bits, bytes, or packets (page 3, col. 25)". Also, in page 6, par. 33, Applicant expressly discloses that the unique designator is associated with the source of the portion of the multiplexed signal for the packetized data. Note that nowhere in the specification, there is support or teaching for "assigning to the **source device** of the at least one packetized data stream, a first unique designator."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 9-20, 22-23, 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Chaney, (U.S. Patent No. 6,035,037).

Regarding claims 1-4, 9-13, 15, and 18-19, Chaney discloses in a system with a plurality of Moving Picture Experts Group type 2 (MPEG-2) standard transport stream

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and a host terminal, a method of designating to an external conditional access module a source of at least one packet of a first MPEG-2 transport stream with a multiplexed signal including the at least one packet of the first MPEG-2 transport stream (col. 6, lines 17-23), the method comprising the steps of:

- assigning to the source device of the first MPEG-2 transport stream a unique designator (i.e., The sub-stream that a particular packet is associated with, is defined by data included in a header portion of each packet)(col. 4, lines 50-67);

- assigning to the source program of the first MPEG-2 transport stream, a program identification number, creating a transport stream source indicator signal that includes the unique designator associated with the at least one packet of the first MPEG-2 transport stream (col. 5, lines 1-30 and col. 8, lines 41-67 and col. 9-10, lines 1-67);

- multiplexing the at least one packet of the first MPEG-2 transport stream with packets from at least a portion of a second MPBG-2 transport stream to create the multiplexed signal, and transmitting to the external conditional access module the transport stream source indicator signal in conjunction with the multiplexed signal, wherein transmission of the transport stream source indicator signal, by the unique designator, indicates the source device of the at least one packet as the source device of the first MPEG-2 transport stream (col. 15, lines 4-65).

Regarding claims 14, 16-17, 20, 22-23, and 30, Chaney discloses an external conditional access module comprising:

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a host terminal interface configured to receive from a host terminal an incoming multiplexed signal comprising at least one packetized data stream that includes a unique source address that indicates a source device of a data packet inside the at least one packetized data stream (col. 5, lines 1-30 and col. 15, lines 65-67 and col. 16, lines 1-37), and a program identification number that indicates a source program of a data packet inside the at least one packetized data stream (col. 5, lines 1-30 and col. 8, lines 41-67 and col. 9-10, lines 1-67);

a de-multiplexer configured for de-multiplexing the incoming multiplexed signal into data packets associated with the at least one packetized data stream based on the unique source address associated with each data packet (col. 14, lines 61-67 and col. 15-16, lines 1-67), a controller (i.e., microcontroller 160) configured for determining if decryption is allowed for the data packet associated with the at least one packetized data stream and for controlling decryption parameters (col. 4, lines 33-50), and a decryptor configured for decrypting, if decryption is allowed, the data packet associated with the at least one packetized data stream using decryption parameters for the at least one packetized data stream (col. 11, lines 17-67 and col. 12, lines 1-51).

Regarding claims 28-29, Chaney discloses a point-of-deployment (POD) module comprising:

a host terminal interface configured to receive from a host terminal, a multiplexed signal comprising a first encrypted signal together with a first transport stream source

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indicator signal (TSSIS) and a program identification number (col. 5, lines 1-30 and col. 15, lines 65-67 and col. 16, lines 1-37);

a demultiplexer configured to use the first TSSIS to identify the first encrypted signal in the multiplexed signal (col. 14, lines 61-67 and Col. 15-16, lines 1-67)., a controller (i.e., microcontroller 160) configured to generate a first decryption instruction upon receiving authorization through a first authorization grant signal (col. 4, lines 33-50), and a first decryptor configured to receive from the demultiplexer, the first encrypted signal, and decrypt the first encrypted signal conditional to receiving the first decryption instruction, wherein the first TSSIS indicates the source device for the first transport stream (col. 11, lines 17-67 and col. 12, lines 1-51).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, 12, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney, (U.S. Patent No. 6,035,037), in view of Hurst, Jr. (U.S. Patent No. 6,985,188 and Hurst hereinafter).

Regarding claims 2, 10, 12, 15, and 19, Chaney does not expressly disclose the format of the packetized data stream.

However, Hurst discloses wherein the packetized data stream is in a format compliant with at least one of Moving Picture Expert Group type 2 (MPEG-2) standard (col. 5, lines 19-67 and col. 6, lines 1-64).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify teachings of Chaney with teachings of Hurst because it would allow to expressly include the Moving Picture Expert Group type 2 (MPEG-2) packetized data stream as disclosed by Hurst. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Hurst to provide an MPEG compatible Video Buffering Verifier (VBV) that reduces the delay involved in channel changes and minimizes any associated user objectionable viewing interruption (Hurst, col. 2, lines 1-25).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arezoo Sherkat
Patent Examiner
Group 2131
September 7, 2006



AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100